



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,662	02/14/2002	Kousaku Okubo	033808/0282102	2972

7590 11/29/2004  
Stanley P Fisher  
REED SMITH LLP  
3110 Fairview Park drive  
suite 1400  
Falls Church, VA 22042

EXAMINER

ALLEN, MARIANNE P

ART UNIT	PAPER NUMBER
----------	--------------

1631

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/077,662

Applicant(s)

OKUBO ET AL.

Examiner

Marianne P. Allen

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-5, 12, 14 and 16-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-11, 13 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's arguments filed 9/17/04 have been fully considered but they are not persuasive.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Election/Restrictions***

Claims 1-5, 10, 12, 14, and 16-34 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the response submitted 2/27/04.

#### ***Information Disclosure Statement***

Applicant is again encouraged to file an Information Disclosure Statement.

#### ***Claim Rejections - 35 USC § 101***

Claims 6-9, 11, 13, and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

This rejection is maintained for reasons of record. The claims are directed to a knowledge database and not to a method or apparatus. The body of the claims does not define any particular data structure or structural organization of the knowledge database such that any structural or functional interrelationship between the data structure and a computer can be realized. This is non-statutory. The claim limitations are directed to characterizing the data present in the database or defining how the data is obtained. The type of data or the process by which it is generated does not make claims to a knowledge database (a compilation of data) statutory. Embedding a compilation of data in a computer-readable medium does not make the

Art Unit: 1631

claims statutory either. This is an equivalent of music on a CD. The amendment with respect to “disposing or displaying relations” in claim 6 is considered to be an intended use and not a structural or functional limitation. (See new matter rejection below.)

***Claim Rejections - 35 USC § 112***

Claims 6-9, 11, 13, and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The claims have been amended and no basis is seen for any of these changes.

At least for example, claim 6 has been amended to recite “embedded in a computer-readable medium.” Applicant pointed to Figure 1, element 105, for support. However, neither this figure nor pages 11 and 13 where this figure and element are described disclose a knowledge database embedded in a computer-readable medium. At least for example, it is not known what “embedded” encompasses.

At least for example, claim 6 has been amended to recite “disposing or displaying relations...” A knowledge database is not an apparatus that disposes or displays. Applicant pointed to page 32 for support. However, this portion of the specification is describing Figure 20. Figure 20 shows a graphic display interface. It is unclear if applicant intends this amendment to be an intended use or to change the nature of the claims to be directed to an apparatus comprising a database and graphic display interface or something else. However, to

Art Unit: 1631

one of ordinary skill in the art, a knowledge database does not comprise a graphic display interface. The originally filed specification and claims do not describe such a concept.

Page 2, line 9, does not disclose objects embedded in publications in a medical or biological field.

Page 7, lines 20-22, does not disclose the new limitations of claim 11.

Page 20, lines 7-16, does not disclose the new limitations of claim 15.

Applicant is requested to point by page and line number in support of each of the amendments to claims 6-9, 11, 13, and 15.

***Claim Rejections - 35 USC § 112***

Claims 6-9, 11, 13, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 as amended is confusing. As written, the knowledge database includes phrase objects but the relations between the objects are no longer part of the database. It is unclear if the relations information disposed or displayed in the second line of the claim is the quantitative relations values of the last line.

Claims 7 and 9 remain confusing in failing to make clear how the synonym object dictionary is structurally or functionally related to the plurality of objects in claim 6.

Claim 8 as amended is confusing and grammatically incomplete. As written, the subject phrase “any of relations” (line 4) lacks a verb or predicate. It is unknown what was intended.

Applicant is invited to explain what this claim requires.

Art Unit: 1631

Claim 11 is confusing. As in claim 6, the relations between objects are not part of the database. If the comparison is between identical materials, the frequencies of existence of the phrases is the same. The examiner does not understand the intent of this claim. Applicant is invited to explain what this claim requires.

Claim 13 is confusing. What does “quantifying a frequency of every two of the phrases” mean?

Claim 15 is confusing. What is considered to meet the limitation of a “high” or “low” similarity value? In addition, the publications of claim 6 are not required to have a page and line number. What are the metes and bounds of “evaluating a short distance with a high similarity value and a long distance with a low similarity value”? What type of evaluation is required?

***Claim Rejections - 35 USC § 102***

Claims 6-9, 11, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by the OMIM (the Online Mendelian Inheritance in Man).

This rejection is maintained for reasons of record.

Claim 6 has been interpreted to be directed to a knowledge database stored in a computer-readable form and comprising a plurality of phrase objects. Limitations to “disposing or displaying relations” and the value of the relations between objects are considered to be intended uses and not positive limitations of the knowledge database. A product by process claim is examined as a product irrespective of the method by which the phrase objects are obtained and stored in the knowledge database. As set forth above, the claims no longer require that the knowledge database contain the relations between the objects.

Art Unit: 1631

The OMIM knowledge database is stored in a computer-readable form and possesses all of the phrase object limitations required by the claims. Phrases in this database would be present in a publication in a medical or biological field and an index thereof.

### ***Conclusion***

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 571-272-0712. The examiner can normally be reached on Monday-Thursday, 5:30 am - 1:30 pm.

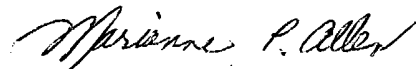
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-0722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is

Art Unit: 1631

(866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Marianne P. Allen  
Primary Examiner  
Art Unit 1631

mpa